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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/650,584

08/28/2003

Diane Buske Ellis

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08/23/2007

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EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1771

MAIL DATE

DELIVERY MODE

08/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/650,584

Applicant(s)

ELLIS, DIANE BUSKE

Examiner

Elizabeth M. Cole

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/309)
Paper No(s)/Mail Date 6/17/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/18/07 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oathout, U.S. Patent No. 5,459,912 in view of Bahten, U.S. Patent NO. 6,182,323 and further in view of Palm et al, U.S. Patent No. 5,776,353. Oathout discloses a clean room wipe made by a process of providing a first layer of polymeric staple fibers, a second layer of natural fibers and hydroentangling to form a composite fabric. The polymeric fibers can be thermoplastic fibers such as polyester, polypropylene or polyamide. See abstract and col. 2, line 50- col. 3, line 29. The natural fibers can be wood pulp or other plant fibers. See col. 4, lines 41-57. Oathout differs from the claimed invention because Oathout does not disclose that the wipe should have a sodium ion content of less than 45 ppm and that it should be rinsed with an acetic acid/water solution. Bahten teaches that materials intended for use as clean room

wipes or brushes, (col. 3, lines 10-27), can advantageously be subjected to acid washing, rinsing and drying, (col. 9, lines 3-20; col. 10, line 60 – col. 11, line 27; col. 12, lines 14-30), in order to remove impurities. Bahten teaches that materials which are thus treated can have a sodium ion content of less than 10 ppm. See Table 1B. Therefore, it would have been obvious to one of ordinary skill in the art to have subjected the clean room wipe of Oathout to the acid washing, rinsing and drying steps of Bahten, motivated by the expectation that these additional process steps would remove additional impurities from the clean room wipe of Oathout. With regard to product claims 6 and 11, while Bahten does not specifically teach employing acetic acid, since Bahten does teach performing treatments on clean room materials in order to remove impurities and reach a sodium ion content of less than 10 ppm, it is reasonable to assume that once the treatment of Bahten was performed on the wipe of Oathout that the resulting wipe would have the claimed sodium ion particle count. . Neither Oathout nor Bahten teach employing acetic acid as the acid wash. Palm et al teaches at col. 13, that acetic acid was recognized in the art as equivalent to citric acid, (which is taught by Bahten) for the purpose of washing materials in order to remove residual impurities. See col. 13, lines 53-64. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed acetic acid in the process taught by Bahten, motivated by the teaching of Palm et al that acetic acid was an art recognized equivalent for this purpose. With regard to the new claim 12, the washing step of Bahten is a single step and the rinsing step of Bahten is a single step.

The claims do not preclude additional washing or rinsing steps. Therefore, the combination renders claim 12 obvious.

4. Applicant's arguments filed 6/18/07 have been fully considered but they are not persuasive.
5. Applicant argues that Oathout fails to disclose the sodium ion content and fails to address an acetic acid/de-ionized water washing step and therefore Oathout fails to appreciate the problem solved by the present invention and fails to take measure to address it. However, Oathout is directed to a method of forming a clean room wipe. Therefore, Oathout is directed broadly to the same problem, since a concern for minimizing impurities is inherent to clean room wipes. Bahten teaches that clean room wipes can be advantageously subjected to acid/water washes and rinses in order to remove impurities and ions to reach a sodium ion content of less than 10 ppm. Thus, while Oathout does not teach the claimed acid washing steps, Bahten does. Therefore, the person of ordinary skill in this would have appreciated that acid washing was a known method of reducing impurities from clean room wipes.
6. Applicant argues that Bahten is drawn to foams or sponges rather than clean room wipes. However, Bahten teaches that the materials can be in the form of wipes, rather than foams, brushes or sponges. See col. 3, lines 24-25 of Bahten.
7. Applicant argues that Oathout is drawn to a material comprising cellulosic fibers rather than the synthetic materials of Bahten. However, Oathout comprises both cellulosic and synthetic polymeric fibers. Further, both references deal with methods of

forming clean room materials. Bahten teaches a method of removing impurities and reducing the ion content of such clean room materials, including clean room wipes. Therefore, the person of ordinary skill in the art would consider the teachings of Bahten as being pertinent to the invention of Oathout.

8. Applicant argues that Bahten teaches away from the claimed invention, because, as discussed at the interview, it would be expected by one of ordinary skill in the art that acids such as citric acids would be expected to harm cellulosic fibers. However, while the cited references have been carefully considered, they do not deal with clean room applications. Further, considerations such as odor and/or yellowing may or may not be a concern in a clean room wipe, since aesthetic considerations may not be as important as functionality of the acid wash. Further, as noted in Wallis et al, U.S. Patent No. 6,645,930, both citric acid and acetic acid were known to be useful treatments for clean room wipes, including wipes which comprised cellulosic fibers. See for example, col. 3, lines 28-57; col. 5, lines 1-55. Therefore, in view of the evidence of Wallis that both acetic acid and citric acid were known to be useful as treatments for cellulosic clean room wipes, the argument that Bahten teaches away from the claimed invention is not persuasive.

9. Applicant argues that Bahten teaches away from the claimed process because it uses multiple steps in the washing process. However, the instant claims employ open language and therefore do not preclude additional steps.

10. With regard to the rejection in view of Palm, Applicant argues that Palm is unrelated to the claimed invention because Palm does not disclose materials which are

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in fiber form. However, while Palm does not teach fibrous materials, Palm clearly sets forth at col. 13, that acetic acid was recognized in the art as equivalent to citric acid, (which is taught by Bahten) for the purpose of washing materials in order to remove residual impurities. See col. 13, lines 53-64. Therefore, the person of ordinary skill in the art would have recognized that acetic acid was an art recognized equivalent for the purpose of performing acid washes to remove residual impurities and would have been motivated to employ acetic acid in the invention of Bahten.

11. In response to applicant's argument that Palm is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Palm is concerned with performing acid washes to remove residual impurities from materials and therefore is reasonably pertinent to the problem with which applicant was concerned.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/
Primary Examiner, Art Unit 1771